



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,467	01/22/2002	Dana Scranton	258/116	6380

45540 7590 06/30/2005
PERKINS COIE LLP/SEMITOOL
PO BOX 1208
SEATTLE, WA 98111-1208

EXAMINER

STINSON, FRANKIE L

ART UNIT	PAPER NUMBER
----------	--------------

1746

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,467

Applicant(s)

SCRANTON ET AL.

Examiner

FRANKIE L. STINSON

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17, 19-23 and 30-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 17, 19-23 and 30-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 1746

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-20, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashkoush et al. (U. S. Pat. No. 5,532,974) in view of Torek et al. (U. S. Pa. No. 6,758,938.)

Re claims 17, Kashkoush is cited disclosing a process for cleaning and drying a batch of workpieces, comprising: holding a batch workpieces in a process chamber introducing ozone into the chamber immersing the workpieces into the process liquid in the process chamber, by raising the level of the process liquid in the process chamber, or by lowering the workpieces into the process liquid, flowing fresh processing liquid (see 44) into the process chamber , while the workpieces are immersed in the process liquid that differs from the claim only in the recitation of heating the processing fluid, drying the workpiece and rotating the batch of workpieces. The patent to Torek is each cited disclosing the arrangement of processing a batch workpiece where there is provided the heating of the ozonated processing fluid (see the claims) and the rotation of the workpieces (see abstract). It therefore would have been obvious to one having ordinary skill in the art to modify the apparatus of Kashkoush, to have the processing fluid heated as taught by Torek, for the purpose of enhancing the treatment process. In regard to the introduction of drying fluid, see Kashkoush col. 4, lines 2-9. Re claims 19, 20 and 32, Kashkoush discloses the bubbling of the ozone and the continuous

Art Unit: 1746

introducing of processing fluid see col. 6, lines 1-6, where the gas is provided to a liquid line 38, the gas would inherently be bubbled. Re claims 31, Kashkoush the weir (44) .

Re claims 32, Kashkoush discloses the spraying of the ozone as at 47.

3. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applied prior art as applied to claim 17 above, and further in view of Konish et al. (U. S. Pat. No.6,145,519).

Claims 21 and 22 define over the applied prior art only in the recitation of the organic vapor. Konish discloses the organic vapor for drying (22). To provide Kashkoush with the same would have been obvious to one having ordinary skill in the art as is common for a drying purposes.

4. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over the applied prior art as applied to claim 17 above, and further in view of Lampert et al. (U. S. Pat. No.5,181,985).

Claim 23 defines over the applied prior art only in the recitation of the nitrogen drying gas. Lampert discloses the nitrogen and to modify the method of Kashkoush to include the same would have been obvious to one having ordinary skill in the art as is commonly done if the art for drying proposes.

4. Claims 34-37 and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Degendt et al. (U. S. Pat. No. 6,551,409) in view of Konish et al. Re claim 34 and 43, Degendt discloses the batch (see col. 4, line43) of wafers, heating of the system (see the claims), the bubbling of ozone gas, and immersing the batch that differs from the claims only in the recitation of the rotation of the wafers. Konish is cited

Art Unit: 1746

disclose disclosing the rotation as claimed as noted above. To modify Degendt, with the same would have been obvious to one having ordinary skill in the art for the purpose of enhancing the cleaning of the wafer. Also note, as applied above, that there is also disclosed the heated gas, the organic solvent, the spraying of the process fluid (4 in Konish).

5. Claims 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over the applied prior art as applied to claim 34 above, and further in view of Lampert et al. Lampert is cited as applied above.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Elsayay note the wafer treating means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached on M-F from 5:30 am to 2:00 pm and some Saturdays from approximately 5:30 am to 11:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 1746

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fls

A handwritten signature in black ink, appearing to read 'Frankie L. Stinson', with a long horizontal flourish extending to the right.

FRANKIE L. STINSON
Primary Examiner
GROUP ART UNIT 1746